

**Amendments to the Claims**

1 - 36. (Cancelled)

37. (New) A method of reducing a stimulus-induced airway response, comprising:  
- administering to a subject at risk of experiencing a stimulus-induced airway response a therapeutically effective amount of an agent selected from the group consisting of:

- (a) human calcitonin gene-related peptide (human CGRP);
- (b) rat CGRP;
- (c) the diacetoamidomethyl cysteine form of (a); and
- (d) the diacetoamidomethyl cysteine form of (b);

wherein said agent is administered prior to said airway response and wherein said method results in no or substantially no haemodynamic side effects.

38. (New) The method of claim 37 wherein said stimulus is selected from the group consisting of a non-specific stimulus and exposure to an irritant.

39. (New) The method of claim 38 wherein said irritant is selected from the group consisting of an allergen and an agonist.

40. (New) The method of claim 37 wherein said airway response is selected from the group consisting of airway constriction, bronchospasm, airway hyperreactivity, eosinophil accumulation in bronchial walls, an increase in airway resistance, or combinations thereof.

41. (New) The method of claim 37 wherein said airway response is selected from the group consisting of early or late phase responses induced by said stimulus.

42. (New) The method of claim 37 wherein said airway comprises the lower segments of the tracheobronchial tree.

43. (New) The method of claim 37 wherein said agent is selected from the group consisting of human CGRP and rat CGRP.

44. (New) The method of claim 37, wherein said agent is selected from the group consisting of the diacetoamidomethyl cysteine form of human CGRP and the diacetoamidomethyl cysteine form of rat CGRP.
45. (New) The method of claim 37 wherein said agent is selected from the group consisting of human  $\alpha$  CGRP and rat  $\alpha$  CGRP.
46. (New) The method of claim 37, wherein said agent is selected from the group consisting of the diacetoamidomethyl cysteine form of human  $\alpha$  CGRP and the diacetoamidomethyl cysteine form of rat  $\alpha$  CGRP.
47. (New) The method of claim 37, wherein said agent is administered via a pulmonary route.
48. (New) The method of claim 37 wherein said agent is administered by inhalation.
49. (New) The method of claim 37, wherein said agent is administered such that it contacts the respiratory epithelium of said subject.
50. (New) The method of claim 37, wherein said agent has a purity of at least about 95 to 98%.
51. (New) The method of claim 37, wherein said agent is dispersed within a composition comprising a pharmaceutically acceptable excipient, and/or a liquid or solid carrier.
52. (New) The method of claim 51, wherein said composition is formulated for administration by inhalation as an aerosol or dry powder.